



TITLE:

New Addition Reactions. (II) : Addition of Aliphatic Epoxides to Schiff Bases

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New Addition Reactions. (II)

Addition of Aliphatic Epoxides to Schiff Bases

Ryohei ODA, Masaya OKANO, Shohei TOKIURA, and Akira MIYASU

Bulletin of the Chemical Society of Japan, **35**, 1216 (1962)

By the stannic chloride-catalyzed addition of aliphatic epoxides to Schiff bases, various oxazolidines have been obtained. For example, the reaction of propylene oxide with N-t-butylazomethine and benzalaniline afforded 3-t-butyl-5-methyl-oxazolidine and 5-methyl-2,3-diphenyloxazolidine in 24% and 30% yields, respectively. The use of boron trifluoride as a catalyst resulted in a lower yield of the desired adduct.

New Addition Reactions. (III)

Addition of Aliphatic Epoxides to Nitriles

Ryohei ODA, Masaya OKANO, Shohei TOKIURA, and Fujio MISUMI

Bulletin of the Chemical Society of Japan, **35**, 1219 (1962)

Upon treatment of aliphatic epoxides with aliphatic or aromatic nitriles in cold concentrated sulfuric acid, the formation of the cyclic adducts, 2,4- and/or 2,5-disubstituted 2-oxazolines, has been observed in low yields (below 20%). The reaction of acetonitrile with propylene oxide gave a mixture of 2,4- and 2,5-dimethyl-2-oxazoline (70:30), while the reaction with epichlorohydrin afforded only 4- (or 5-) chloromethyl-2-methyl-2-oxazoline.

Partial Asymmetric Synthesis in the Conjugate Addition of a Grignard Reagent to an α, β -Unsaturated Ester

YUZO INOUE and H. M. WALBORSKY

Journal of Organic Chemistry, **27**, 2706 (1962)

In the series of our asymmetric synthesis studies, a successful asymmetric synthesis in a Diels-Alder condensation has recently been reported (H. M. Walborsky, L. Barash and T. C. Davis, *J. Org. Chem.*, **26**, 4778 (1961)) and the resemblance in mechanism suggested the possibility of asymmetric synthesis in the conjugate addition of a Grignard reagent to an α, β -unsaturated ester.

The addition of phenylmagnesium bromide to (-)-menthyl crotonate resulted